What is claimed is:

1. A method for detecting peaks of a correlation signal, the method comprising:

determining whether an amplitude of a pulse of the correlation signal exceeds by at least a first delta an amplitude of a prior peak; and

if so, designating the pulse as a peak and setting an amplitude of the peak as the amplitude of the prior peak increased by a second delta.

2. The method of claim 1, wherein the first delta equals the second delta.

3. The method of claim 1, wherein the second delta is a value of a nondecreasing function of the time between the prior peak and the pulse.

4. The method of claim 1, wherein the second delta is a value of a nondecreasing function of the prior peak amplitude.

5. The method of claim 1, wherein the second delta is a value of a function of the prior peak amplitude and the time between the prior peak and the pulse.

6. The method of claim 2, wherein the second delta is a value of a function of the prior peak amplitude and the time between the prior peak and the pulse.

7. The method of claim 1, further comprising:

determining whether the amplitude of the correlation signal pulse falls below an amplitude of the prior peak less a droop value; and

if so, not designating the pulse as a peak.

8. The method of claim 7, further comprising:

if the amplitude of the correlation signal pulse falls between the prior peak amplitude less the droop value and the prior peak amplitude increased by the first delta, designating the pulse as a peak and setting the amplitude of the peak as the amplitude of the correlation signal pulse.

9. The method of claim 7, wherein the droop value is a value of a nondecreasing function of the time between the prior peak and the pulse.

10. The method of claim 7, wherein the droop value is a value of a nondecreasing function of the prior peak amplitude.

11. The method of claim 7, wherein the droop value is a value of a function of the prior peak amplitude and the time between the prior peak and the pulse.

12. The method of claim 1, further comprising:

bandpass filtering an input signal with a bandpass filter having a transfer function shape; and

correlation filtering the bandpass filtered signal with a correlation filter having a transfer function shape substantially similar to the transfer function shape of the bandpass filter.

13. The method of claim 12, the correlation signal peaks corresponding to positions of marks on a medium, wherein the bandpass filtering attenuates DC and frequencies above a cutoff frequency, the cutoff frequency determined by a low-noise frequency response region of a spectrum representative of each mark.

14. The method of claim 13, wherein the medium is magnetic tape.

15. The method of claim 14, wherein the marks are servo marks on the tape.

16. The method of claim 15, wherein the servo marks are optically detectable.

17. The method of claim 16, wherein the servo marks are optically detectable on a surface of the tape opposite a magnetic surface of the tape.

18. A correlation receiver for detecting peaks of a correlation signal, the correlation receiver comprising:

a master peak detector for determining whether an amplitude of a pulse of the correlation signal exceeds by at least a first delta an amplitude of a prior peak; and, if so, designating the pulse as a peak and setting an amplitude of the peak as the amplitude of the prior peak increased by a second delta.

19. The correlation receiver of claim 18, wherein the first delta equals the second delta.

20. The correlation receiver of claim 18, wherein the second delta is a value of a nondecreasing function of the time between the prior peak and the pulse.

21. The correlation receiver of claim 18, wherein the second delta is a value of a nondecreasing function of the prior peak amplitude.

22. The correlation receiver of claim 18, wherein the second delta is a value of a function of the prior peak amplitude and the time between the prior peak and the pulse.

23. The correlation receiver of claim 19, wherein the second delta is a value of a function of the prior peak amplitude and the time between the prior peak and the pulse.

24. The correlation receiver of claim 18, wherein the master peak detector determines whether the amplitude of the correlation signal pulse falls below an amplitude of the prior peak less a droop value, and, if so, the master peak detector does not designate the pulse as a peak.

25. The correlation receiver of claim 24, wherein the master peak detector determines whether the amplitude of the correlation signal pulse falls between the prior peak amplitude less the droop value and the prior peak amplitude increased by the first delta, and, if so, the master peak detector designates the pulse as a peak and sets the amplitude of the peak as the amplitude of the correlation signal pulse.

26. The correlation receiver of claim 24, wherein the droop value is a value of a nondecreasing function of the time between the prior peak and the pulse.

27. The correlation receiver of claim 24, wherein the droop value is a value of a nondecreasing function of the prior peak amplitude.

28. The correlation receiver of claim 24, wherein the droop value is a value of a function of the prior peak amplitude and the time between the prior peak and the pulse.

29. The correlation receiver of claim 1, further comprising:

a bandpass filter, having a transfer function shape, for bandpass filtering an input signal; and

a correlation filter for correlation filtering the bandpass filtered signal, the correlation filter having a transfer function shape substantially similar to the transfer function shape of the bandpass filter.

30. The correlation receiver of claim 29, the correlation signal peaks corresponding to positions of marks on a medium, wherein the bandpass filter attenuates DC and frequencies above a cutoff frequency, the cutoff frequency determined by a low-noise frequency response region of a spectrum representative of each mark.

31. The correlation receiver of claim 30, wherein the medium is magnetic tape.

32. The correlation receiver of claim 31, wherein the marks are servo marks on the tape.

33. The correlation receiver of claim 32, wherein the servo marks are optically detectable.

34. The correlation receiver of claim 33, wherein the servo marks are optically detectable on a surface of the tape opposite a magnetic surface of the tape.

35. A method for detecting a pulse input signal comprising:

bandpass filtering the input signal with a bandpass filter having a transfer function shape;

correlation filtering the bandpass filtered signal with a correlation filter having a transfer function shape substantially similar to the transfer function shape of the bandpass filter; and

detecting peaks of the correlation filtered signal.

36. The method of claim 35, the correlation signal peaks corresponding to positions of marks on a medium, wherein the bandpass filtering attenuates frequencies above a cutoff frequency, the cutoff frequency determined by a low-noise frequency response region of a spectrum representative of each mark.

37. The method of claim 36, wherein the medium is magnetic tape.

38. The method of claim 37, wherein the marks are servo marks on the tape.

39. The method of claim 38, wherein the servo marks are optically detectable.

40. The method of claim 39, wherein the servo marks are optically detectable on a surface of the tape opposite a magnetic surface of the tape.

41. A correlation receiver for detecting a pulse input signal comprising:

a bandpass filter, having a transfer function shape, for bandpass filtering the input signal;

a correlation filter for correlation filtering the bandpass filtered signal, the correlation filter having a transfer function shape substantially similar to the transfer function shape of the bandpass filter; and

a detector for detecting peaks of the correlation filtered signal.

42. The correlation receiver of claim 41, the correlation signal peaks corresponding to positions of marks on a medium, wherein the bandpass filter attenuates frequencies above a cutoff frequency, the cutoff frequency determined by a low-noise frequency response region of a spectrum representative of each mark.

43. The correlation receiver of claim 42, wherein the medium is magnetic tape.

44. The correlation receiver of claim 43, wherein the marks are servo marks on the tape.

45. The correlation receiver of claim 44, wherein the servo marks are optically detectable.

46. The correlation receiver of claim 45, wherein the servo marks are optically detectable on a surface of the tape opposite a magnetic surface of the tape.